**Placement of Medtronic LINQ in the left anterior axillary position**

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**Background:** Implantable loops recorders (ILR) are utilized for long-term rhythm monitoring. The Medtronic LINQ is typically placed in the subcutaneous tissue along the left parasternal boarder in order to record a suitable R-wave amplitude. However, ILR placement in this location may compromise the quality and/or feasibility of future imaging studies including transthoracic echocardiography and cardiac MRI which are important for ongoing assessment in patients with congenital heart disease. In this study, we sought to evaluate the utility of placing an ILR in the left axillary position and the impact on the quality of cardiac imaging.

**Methods:** We reviewed all patients from May 2017 to June 2018 who had placement of an ILR (Medtronic LINQ device) in the left axillary position. ILR placement occurred in both the operating room and electrophysiology lab dependent upon concomitant procedures. Demographic, procedural, and clinical data were collected via retrospective review of the electronic medical record.

**Results:** Eight patients had ILRs placed in the left anterior axillary position during the study period. Seven patients had Ebstein anomaly. Six patients (75%) had an ILR placed in the operating room. All patients had adequate tracings to allow for diagnostic evaluation. R wave measurements ranged from 0.24 to 1.7 mV (median = 0.85 mV). Cardiac MRI was obtained in 5 patients following LINQ placement with adequate image quality and no adverse events. One device was explanted 28 days after placement due to concern for possible infection. No other devices have required removal or revision with median follow up duration 11 months (IQR 8-13.5).

**Conclusion:** ILR placement in the left anterior axillary position can provide adequate signals in appropriately selected patients. This device position may allow for better cardiac imaging quality, particularly cardiac MRI.

**Figure 1:** Cardiac MRI axial image with LINQ (arrow) in the left anterior axillary position which does not obscure visualization of cardiac structures.